

Applic. No.: 09/940,092
Amdt. Dated August 20, 2004
Reply to Office action of May 20, 2004

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of claims:

Claim 1 (currently amended): An anti-theft system for a motor vehicle, comprising:

a vehicle-mounted transceiver unit for emitting an interrogation signal, said transceiver unit having an antenna unit emitting a wave having one of an elliptical polarization and a circular polarization and the wave including the interrogation signal;

a portable code transmitter transmitting back a response signal ~~upon~~ only after receiving the interrogation signal having one of the elliptical polarization and the circular polarization; and

a vehicle-mounted evaluation unit receiving and checking an authorization of the response signal and upon the response signal providing proper authorization, said vehicle-mounted evaluation unit evaluating a received signal and comparing a code content of the received signal with a stored value only after receiving a circularly polarized or elliptically

Applic. No.: 09/940,092
Amdt. Dated August 20, 2004
Reply to Office action of May 20, 2004

polarized signal, said evaluation unit one of triggering and enabling vehicle-specific functions.

Claim 2 (original): The anti-theft system according to claim 1, wherein at least one of said transceiver unit and said code transmitter has at least two antennas disposed approximately perpendicularly to one another and are controlled phase-shifted with respect to one another for a transmission of signals in order to generate the wave.

Claim 3 (original): The anti-theft system according to claim 1, wherein the vehicle-specific functions include a locking of locks, an unlocking of the locks, a turning-off of an immobilizer, and a turning-on of the immobilizer, and the vehicle-specific functions are controlled by the response signal generated by said code transmitter.

Claim 4 (currently amended): A method for operating an anti-theft system, which comprises the steps of:

using a vehicle-mounted transceiver unit for emitting an interrogation signal provided in a wave having one of an elliptical polarization and a circular polarization;

Applic. No.: 09/940,092
Amdt. Dated August 20, 2004
Reply to Office action of May 20, 2004

receiving the interrogation signal having one of the elliptical polarization and the circular polarization in a portable code transmitter; and

transmitting back a response signal by the code transmitter only if at least two field components of the interrogation signal which are different in their spatial direction are received; and

evaluating a received signal and comparing a code content of the received signal with a stored value using a vehicle-mounted evaluation unit only after receiving a circularly polarized or elliptically polarized signal.

Claim 5 (original): The method according to claim 4, which comprises generating the wave using two coils disposed perpendicularly with respect to one another, the two coils functioning as antennas and are actuated by a phase angle of less than/equal to 90° with respect to one another.

Claim 6 (original): The method according to claim 5, which comprises actuating one of the two antennas for at least a predetermined time period starting at a predetermined time with a modified transmission power.

Applic. No.: 09/940,092

Amdt. Dated August 20, 2004

Reply to Office action of May 20, 2004

Claim 7 (currently amended): A method for operating an anti-theft system, which comprises the steps of:

receiving an interrogation signal in a wave having one of an elliptical polarization and a circular polarization in a portable code transmitter and subsequently transmitting back a response signal as a wave having one of an elliptical polarization and a circular polarization; and

recognizing the response signal as being authorized by a vehicle-mounted transceiver unit only after receiving a circularly polarized or elliptically polarized signal and only if, at least two field components of the response signal which are different in their spatial direction are received and, a coded information item contained in the response signal corresponds to a coded information item expected by the vehicle-mounted evaluation unit.

Claim 8 (original): The method according to claim 7, which comprises generating the wave using two coils disposed perpendicularly with respect to one another, the two coils functioning as antennas and are actuated by a phase angle of less than/equal to 90° with respect to one another.

Applic. No.: 09/940,092

Amdt. Dated August 20, 2004

Reply to Office action of May 20, 2004

Claim 9 (original): The method according to claim 8, which comprises actuating one of the two antennas for at least a predetermined time period starting at a predetermined time with a modified transmission power.